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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,668	01/27/2000	Roy A. Garver	242/300	1205

33451 7590 08/27/2003

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EXAMINER

WALSH, DANIEL I

ART UNIT PAPER NUMBER

2876

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/492,668

Applicant(s)

GARVER, ROY A.

Examiner

Daniel I Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication; even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-49 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-20, 22-32 is/are rejected.
- 7) ☒ Claim(s) 4 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 10 March 2003.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7, 8-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roslak (US 5,825,002).

Roslak teaches a self-checkout system. Specifically, Roslak teaches a method for retail checkout comprising the steps of establishing a communication link between a self checkout station incorporating a customer operated payment accepting subsystem and a data storage unit in which a plurality of data records are stored, each of the plurality of data records corresponding to a respective one of a plurality of identifiers that was read by a portable data reading unit before the communication link was established; inputting the plurality of data records from the data storage unit via the communication link establishing step; determining a price total for a plurality of items corresponding to the plurality of identifiers based on the plurality of data records inputted in the inputting step; and accepting payment for the plurality of items based on the price total determined in the determining step, wherein the step of accepting payment is performed using the customer operated automated payment accepting subsystem through

“Once a customer has been issued a bar code reader 40, the customer proceeds through the retail facility a uses the bar code reader 40 to record purchases”...Once the customer has completed their product selection, the customer returns the bar code reader 40 to the dispenser unit 30....Upon return of the bar code reader 40, information collected with the bar code reader 40 is downloaded to a central processing unit...Once the central processing system has successfully received the customer information from the bar code reader 40, the customer proceeds to a checkout register 50 for payment of the products selected...The checkout system may be an automated system or a manually operated system...” (col 4, lines 1+). As discussed above, a communication link is established between a data storage unit 40 and a self-checkout station incorporating a customer operated payment-accepting subsystem, as the register is connected to the customer data file through the central processing system 100. It is also obvious that the items are scanned in and a total is calculated based on the bar code reader as it scans items in for purchase and returns the unit to the dispenser, Payment is accepted at the register, as discussed above, that is in communication with the portable unit, as is well known in the art.

Re claim 2, it is discussed above that the readers 40 store the data.

Re claim 7, it has been discussed above that the payment accepting subsystem/automated registers (50) can include card reading devices, which are well known in the art of self checkout systems.

Re claim 8, the limitations have been discussed above, re claim 1.

Re claim 9, it is taught above that the data of the desired items is transferred into the self checkout station from the portable reading unit, as the portable reading unit transfers the data to the central processing system 100, and then to the register 50 for automated payment.

Re claim 10, it is understood that the portable reading unit transfers the data through the base station 30, to the register, as taught above.

Re claim 11, it is taught above that the barcode symbols are read by the portable data unit.

Re claim 12, it has been taught above, re claim 7, that the payment subsystem comprises a card transaction device.

Re claim 14, it is obvious that the obtaining step takes places while scanning items in the aisle, and the linking step takes place at the dispenser unit 30.

Re claim 15, though Roslak et al. is silent to the specific mention of a twenty foot separation between locations, such a separation would have been obvious to an artisan of ordinary skill in the art, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Furthermore, it would have been obvious to have a twenty foot separation to separate the locations in order to reduce the amount of customer traffic/congestion, to conform to store layouts, etc. Such a separation between conventional registers and item aisles are well known in the art, and accordingly such a separation in the claimed self-checkout system would have been plainly obvious.

3. Claims 3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roslak in view of Ruppert et al.

The teachings of Roslak have been discussed above.

Re claims 3 and 6, Roslak is silent to the use of an RF scanner. Re claim 4, Roslak is silent to the outputting of signals in a format mimicking that of conventional POS scanning

terminal. Re claim 5, Roslak is silent to the use of a flying spot scanner, an optical imaging reader, or a wand reader.

Re claims 3 and 6, Ruppert et al. teaches the use of an RF interface to receive data through "A portable barcode and RF ID tag reader that gathers information about items to be purchased etc. by reading barcodes or RF ID tags". It is understood that an RF interface exists in the reader in order to process the RF tag.

Re claim 5, such optical reading devices for barcodes are well known and accepted in the art. Specifically, Ruppert et al. teaches the use of different types of devices for scanning barcodes through "In alternative embodiments, the bar code scanner can be a laser diode based scanner, LED contact scanner, optical or magnetic scanner or character reader" (col 6, lines 61+).

Therefore, Ruppert et al. teaches the use of various types of optical reading devices.

Consequently, it would have been an obvious matter of design variation to choose a flying sport scanner/optical imaging reader/wand reader, since it has been taught above that there are numerous suitable optical reading devices, and choosing a well-known reader would have been an obvious matter of design variation.

Therefore, at the time the invention was made, it would have been obvious to an artisan to combine the teachings of Roslak with those of Ruppert et al.

One would have been motivated to do this to have a self checkout system that is operated with optical/RF input devices that are well known in the art, that is spaces apart in a manner that is well accepted in the art, in accordance with conventional systems.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roslak/Ruppert et al., in view of Dumont.

The teachings of Roslak/Ruppert et al. have been discussed above.

Roslak/Ruppert et al. teaches linking the portable unit by placing it in a station (dispenser 30) but is silent to the portable reading unit being put in a cradle on the self-checkout station.

Dumont teaches the use of a handset receptacle 62, as shown in FIG. 7, which is interpreted as a cradle type unit to accept the terminal and hold it for transfer, in the self-service store.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Roslak/Ruppert et al. with those of Dumont.

One would have been motivated to do this for the ease of communication and payment

4. Claims 16-20, 22-27 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roslak in view of Dumont.

The teachings of Roslak have been discussed above.

Re claim 16, it is obvious that a data input port is used to take data from the portable reader unit 40 at the base 30, and sends it to the central processor 100 and then to the register 50 for purchase. It is well known and conventional in the art that the payment acceptor generates an output signal based upon payment and an indication if the payment is sufficient, as is conventional at self-checkout registers. Further, though Roslak teaches that a running total is kept on the portable reading device, it is well within the skill in the art for the central processor/system 100 (controller) to determine a final total amount 100, as is processes the scanned in data and sends it to the register for purchase, as is conventional in the art.

Re claim 17, it has been discussed above that the data storage unit is the portable reader.

Re claim 18, the limitations have been discussed above re claim 5.

Re claim 19, the limitations have been discussed above, re claim 6.

Re claim 20, it has been discussed above that station 30 communicates with the reading unit.

Re claim 22, as is conventional in the art, an automated payment subsystem generates an indication of an amount of payment received based on cash/card input.

Re claim 23, the teachings have been discussed above re claim 13.

Re claim 24, the limitations have been discussed above re claim 12.

Re claim 25, the limitations have been discussed above. As the data is stored on the portable reading unit, it includes a memory. Further, barcodes are interpreted as identifiers. As discussed above, the information is sent from the portable reading device to the self-checkout station where payment is made.

Re claim 26, it has been taught above that the identifiers are barcodes that are read by various barcode readers. The selection of a well-known and conventional reader would have been obvious to one of ordinary skill in the art to effect a desired result.

Re claim 27, optical characters include barcodes.

Re claim 30, Roslak teaches a price lookup table on the portable device through “the reader permits a customer to...perform a price check or other information check by pressing an “equals” key” (col 4, lines 19+).

Re claim 31, the self-checkout station includes an interface to a point of sale system, through the use of register 50.

Re claim 32, the limitations have been discussed above re claim 7.

Roslak is silent to the register 50 and dispenser 30 being at the same station.

Dumont teaches the register and interface for the portable data unit to be at the same station (FIG. 7).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Roslak with those of Dumont.

One would have been motivated to do this to have a consolidated station for convenience of the user, as is conventional in self-checkout stations where produce information is input and payment is made.

5. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roslak and Dumont in view of Ruppert et al.

The teachings of Roslak/Dumont have been discussed above.

Roslak/Dumont is silent to the use of an RF scanner/reading means.

Ruppert et al. teaches the use of RF means (see claims 3-6 above).

At the time the invention was made, it would have been an obvious matter of design variation, well within the skill in the art to combine the teachings of Roslak/Dumont with those of Ruppert et al., in order to use a well known and conventional wireless system (RF) for convenience. Such selection of a well-known system is within the skill in the art to effect a desired result.

Re claim 29, Ruppert et al. teaches the downloading of price information from a first interface to a second interface (from a base station) (col 7, lines 10+) through a wireless interface. Though Ruppert et al. is silent to RF interfacing, it would have been obvious to an

artisan of ordinary skill in the art to use an RF interface, since such a wireless means of communication is well known and accepted, and produces predictable results.

Response to Arguments

6. Applicant's arguments filed 10 March 2003 have been fully considered. The Examiner has incorporated the new art of Roslak to meet the claimed limitations of a self-checkout system.

Allowable Subject Matter

7. Claims 4 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach that signals are output from the self checkout station to a POS controller through an interface that formats the signals to mimic signals output by conventional POS scanning terminals, and the use of two controllers at the self service station.

9. Claims 33-49 are allowed.

10. The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach the use of a base station including a second RF interface that sends data to the self checkout station, that is received from the portable terminal..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel Walsh** whose telephone number is **(703) 305-1001**. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**daniel.walsh@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

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D. Walsh

DW
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KARL D. FRECH
PRIMARY EXAMINER